

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1-12 (canceled)

Claim 13 (currently amended): In a method of mounting electronic parts on a flexible printed circuit board in which a plurality of flexible printed circuit boards are held on a transfer carrier for the flexible printed circuit boards which is formed by a base plate and a resin layer formed on an upper surface of the base plate, and semiconductor devices are bonded on bonding portions of the flexible printed circuit boards, the method comprising the steps of:

contacting reference portions of the base plate with reference members thereby to relatively position reference pin opening portions opened at the base plate and reference pins to be respectively inserted into reference holes of the flexible printed circuit boards in a contact state where the reference pins are respectively penetrated through the reference pin opening portions;

inserting the reference pins into the reference holes of the flexible printed circuit boards to position the flexible printed circuit boards, respectively, and contacting adhesively lower surfaces of the flexible

printed circuit boards to the resin layer in [[this]]the
contact state;

 withdrawing the reference pins from the reference
holes and releasing the contact state between the reference
portions and the reference members;

 inserting a back-up portion of a bonding apparatus
into a back-up opening portion which is formed at a position
of the transfer carrier corresponding to the bonding
portion of the flexible printed circuit board thereby to
support the bonding portion from a lower direction; and

 bonding a semiconductor device on the bonding portion
supported by the back-up portion.

Claim 14 (currently amended): In a method of mounting
electronic parts on a flexible printed circuit board in
which a plurality of flexible printed circuit boards are
held on a transfer carrier for the flexible printed circuit
boards which is formed by a base plate and a resin layer
formed on an upper surface of the base plate, semiconductor
devices are bonded on bonding portions of the flexible
printed circuit boards, and small parts are soldered on
solder coupling portions, the method comprising the steps
of:

 contacting reference portions of the base plate with
reference members thereby to relatively position reference
pin opening portions opened at the base plate and reference

pins to be respectively inserted into reference holes of the flexible printed circuit boards in a contact state where the reference pins are respectively penetrated through the reference pin opening portions;

inserting the reference pins into the reference holes of the flexible printed circuit boards to position the flexible printed circuit boards, respectively, and contacting adhesively lower surfaces of the flexible printed circuit boards to the resin layer in [[this]]the contact state;

withdrawing the reference pins from the reference holes and releasing the contact state between the reference portions and the reference members;

inserting a back-up portion of a bonding apparatus into a back-up opening portion which is formed at a position of the transfer carrier corresponding to the bonding portion of the flexible printed circuit board thereby to support the bonding portion from a lower direction;

bonding a semiconductor device on the bonding portion supported by the back-up portion;

supplying solder to electrodes of the solder coupling portions of the flexible printed circuit boards on which the semiconductor devices are bonded;

contacting the small parts to the solder thereby to mount the small parts on the flexible printed circuit boards on which the semiconductor devices are bonded;

transferring into a heating furnace and heating a transfer carrier for the flexible printed circuit boards which holds the flexible printed circuit boards on which the small parts are mounted thereby to melt the solder to solder the small parts; and

taking out the flexible printed circuit boards on which the semiconductor devices are bonded and the small parts are soldered from the resin layer of the transfer carrier.

Claim 15 (currently amended): In a method of mounting electronic parts on a flexible printed circuit board in which a plurality of flexible printed circuit boards are held on a transfer carrier for the flexible printed circuit boards which is formed by a base plate and a resin layer formed on an upper surface of the base plate, and semiconductor devices are bonded on bonding portions of the flexible printed circuit boards, the method comprising the steps of:

contacting reference portions of the base plate with reference members thereby to relatively position reference pin opening portions opened at the base plate and reference pins to be respectively inserted into reference holes of the flexible printed circuit boards in a contact state where the reference pins are respectively penetrated through the reference pin opening portions;

inserting the reference pins into the reference holes of the flexible printed circuit boards to position the flexible printed circuit boards, respectively, and contacting adhesively lower surfaces of the flexible printed circuit boards to the resin layer in [[this]]the contact state;

withdrawing the reference pins from the reference holes and releasing the contact state between the reference portions and the reference members;

inserting a back-up portion of a bonding apparatus at a position of the opening portions corresponding to the bonding portion of the flexible printed circuit board thereby to support the bonding portion from a lower direction; and

bonding a semiconductor device on the bonding portion supported by the back-up portion.

Claim 16 (currently amended): In a method of mounting electronic parts on a flexible printed circuit board in which a plurality of flexible printed circuit boards are held on a transfer carrier for the flexible printed circuit boards which is formed by a base plate and a resin layer formed on an upper surface of the base plate, semiconductor devices are bonded on bonding portions of the flexible printed circuit boards, and small parts are soldered on

solder coupling portions, the method comprising the steps of:

contacting reference portions of the base plate with reference members thereby to relatively position opening portions opened at the base plate and reference pins to be respectively inserted into reference holes of the flexible printed circuit boards in a contact state where the reference pins are respectively penetrated through the opening portions;

inserting the reference pins into the reference holes of the flexible printed circuit boards to position the flexible printed circuit boards, respectively, and contacting adhesively lower surfaces of the flexible printed circuit boards to the resin layer in [[this]]the contact state;

withdrawing the reference pins from the reference holes and releasing the contact state between the reference portions and the reference members;

inserting a back-up portion of a bonding apparatus at a position of the opening portions corresponding to the bonding portion of the flexible printed circuit board thereby to support the bonding portion from a lower direction;

bonding a semiconductor device on the bonding portion supported by the back-up portion;

supplying solder to electrodes of the solder coupling portions of the flexible printed circuit boards on which the semiconductor devices are bonded;

contacting the small parts to the solder thereby to mount the small parts on the flexible printed circuit boards on which the semiconductor devices are bonded;

transferring into a heating furnace and heating a transfer carrier for the flexible printed circuit boards which holds the flexible printed circuit boards on which the small parts are mounted thereby to melt the solder to solder the small parts; and

taking out the flexible printed circuit boards on which the semiconductor devices are bonded and the small parts are soldered from the resin layer of the transfer carrier.